

Abstract of D2: JP-U-3-56403

Utility Model

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Title of Invention: OUTER TUBE FOR ENDSCOPE

Applicant: OLYMPUS

A conventional outer tube as shown in Figure 7 comprises one sealing member 3 for sealing a gap between a gripper 2 and a endoscope inserting portion 4. Since it seals at only one location, the conventional outer tube has a lower sealing performance and is easy to create a gap between an inserting hole 5 of the sealing member 3 and the endoscope inserting portion 4 during use as shown in Figure 8.

An outer tube of the present invention comprises an outer tube body 14, an insertion tube 12 enable to insert an insertion part 11 of an endoscope, and a grip 13 mounted at a proximal end of the insertion tube 12.

Figure 3 shows a second embodiment of the present device.

The present embodiment is such that one seal member 37 elongated into an axial direction is provided in the grip 13 by being sandwiched between a front side holding tube 35 and a rear side holding tube 36. However, a plurality of sealing parts 38 are projected in an axial direction at intervals on an inner peripheral surface of the seal member 37. When the endoscope insertion part 11 (see Figure 2) is inserted into an insertion hole 39 of the seal member 37, each of the sealing parts 38 is adhered to an outer peripheral surface of the endoscope insertion part 11 at several locations in an axial direction.